



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBD29826-3
Job Sheet 181564

DAS
21
9-89



Part No: RBD29826-3

Job Qty: 25 ea

Part Name: Torque Wrench Adapter 4 Blade



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 7/31/18

Job Tracking No: **DEVATION**

Due Date: 7/31/18

Created By: Logan David

Type: SOLD

Description:

Ship Via:

Rev 2. DWG RBD29826-3

DAS
03
9-89

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	28 Ea	7/31/18	7/31/18	0.00	0.00	Start Up Waterjet2		on 18/08/01
100	Waterjet	28 pcs	7/31/18	7/31/18	0.25	4.67	Waterjet 2 OMAX		on 18/08/01
110	QC	28 pcs	7/31/18	7/31/18	0.00	0.00	QC2 Waterjet-4		on 18/08/01
120	Lathe Conv	28 pcs	7/31/18	7/31/18	0.50	4.67	Lathe Conv-2		
130	QC	28 pcs	7/31/18	7/31/18	0.00	0.00	QC2 Machining-5		
140	Mill Conv	28 pcs	7/31/18	7/31/18	0.50	3.50	Mill Conv 2		
150	QC	28 pcs	7/31/18	7/31/18	0.00	0.00	QC2 Machining-5		on 18/08/01
160	QC	28 pcs	7/31/18	7/31/18	0.00	0.00	QC8 Machining-5		on 18/08/01
170	Small Fab	28 pcs	7/31/18	7/31/18	0.00	0.00	Small Fab-9		on 18/08/01
180	QC	28 pcs	7/31/18	7/31/18	0.00	0.00	QC5		on 18/08/01
190	Packaging	28 pcs	7/31/18	7/31/18	0.00	0.00	Packaging3-2		on 18/08/01
200	QC21-SA	28 Ea	7/31/18	7/31/18	0.00	0.00	QC21		on 18/08/01

Part Op 170 - Engrave

Descriptions: 190 - IDENTIFY AND STOCK

21
9-89

AUG 10 2018

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT 4140 S 0.375	AISI 4140 Steel Sheet cut to size" 4ft x 4 ft	1.2152 sf (.0434 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140 S-0.375	1	36	0

M 304B0.500 x 6.000

5048646

Part Specifications

Specifications could not be found.

Plex 7/31/18 5:14 PM dart.logan.david



Container No: S098559



Part: RBD29826-3

Job No: 181564

Serial No/Batch: S098559

Revision:

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 08/02/18

64463
50
08/02/18

M304 B0:0 500 + 6.000

5048646

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



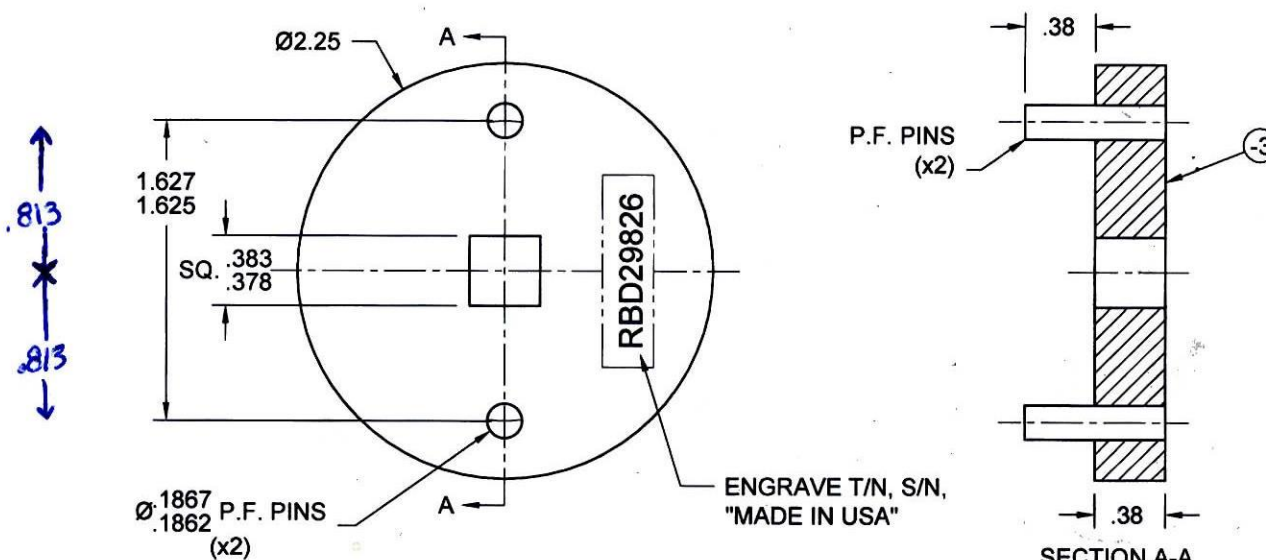
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: <u>181607</u> Part No. <u>RBD29826 Rev. 2</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																																							
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																																																												
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																																																												
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																																																												
Large Fab ☐	Composite ☐	Supplier ☐																																																																																																													
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval <i>M. Lee</i> July 31, 2018																																																																																																									
Description Work Order Deviation RBD29826-3 can be manufactured from 303, 304, 316, 17-4PH-H900/H925/H1025/H1075/H1150 as an alternative material. The dowel pins must be replaced with McMaster Carr 98380A508 or equivalent. Finishing with Black Oxide is not required if the part is manufactured from Stainless Steel				Disposition - This deviation is acceptable. - The fit, form and function of the part will be as originally intended.		Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="4" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td style="width:12.5%;">Environment</td><td style="width:12.5%;">☐</td> <td style="width:12.5%;">No Re-verification</td><td style="width:12.5%;">☐</td> <td style="width:12.5%;">Pressure/Forced</td><td style="width:12.5%;">☐</td> <td style="width:12.5%;">Temperature/Cure</td><td style="width:12.5%;">☐</td> </tr> <tr> <td>Design</td><td>☐</td> <td>Operator</td><td>☐</td> <td>Bending</td><td>☐</td> <td>Set-up</td><td>☐</td> </tr> <tr> <td>Doc/Data</td><td>☐</td> <td>Offset/Setup</td><td>☐</td> <td>Centre Not Concentric</td><td>☐</td> <td>BOM/Route</td><td>☐</td> </tr> <tr> <td>Equip/Tooling</td><td>☐</td> <td>Supplier</td><td>☐</td> <td>Cracks</td><td>☐</td> <td>Broken/Damage/Defect</td><td>☐</td> </tr> <tr> <td>Handling/Pre</td><td>☐</td> <td>Training</td><td>☐</td> <td>Crimp/Kink/Ripple/Wave</td><td>☐</td> <td>Inspection Incomplete/Unqualified</td><td>☐</td> </tr> <tr> <td>Material</td><td>☒</td> <td>Use for Testing</td><td>☐</td> <td>Cuffs</td><td>☐</td> <td>Contamination</td><td>☐</td> </tr> <tr> <td>Internal Transport</td><td>☐</td> <td>Poor Information</td><td>☐</td> <td>Crushing</td><td>☐</td> <td>Countersink</td><td>☐</td> </tr> <tr> <td>Tribal Knowledge</td><td>☐</td> <td>Rushing</td><td>☐</td> <td>Heat Treat</td><td>☐</td> <td>Cut Too Short</td><td>☐</td> </tr> <tr> <td>LOA</td><td>☐</td> <td>Product Improvement</td><td>☐</td> <td>Wave/Twist in Tube</td><td>☐</td> <td>Instructions Incomplete/Unclear</td><td>☐</td> </tr> <tr> <td>Substation</td><td>☐</td> <td>Process Improvement</td><td>☐</td> <td>Marks/Chatter</td><td>☐</td> <td>Drill Holes</td><td>☐</td> </tr> <tr> <td>Past Expiry Date</td><td>☐</td> <td>Manufacturing Process</td><td>☐</td> <td colspan="4"></td> </tr> <tr> <td>Misidentified</td><td>☐</td> <td>Past Due</td><td>☒</td> <td colspan="4" style="text-align: left;">OTHER : _____</td> </tr> </tbody> </table>								Root Cause				FAULT CATEGORY				Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Design	☐	Operator	☐	Bending	☐	Set-up	☐	Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Material	☒	Use for Testing	☐	Cuffs	☐	Contamination	☐	Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Past Expiry Date	☐	Manufacturing Process	☐					Misidentified	☐	Past Due	☒	OTHER : _____			
Root Cause				FAULT CATEGORY																																																																																																											
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐																																																																																																								
Design	☐	Operator	☐	Bending	☐	Set-up	☐																																																																																																								
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐																																																																																																								
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐																																																																																																								
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐																																																																																																								
Material	☒	Use for Testing	☐	Cuffs	☐	Contamination	☐																																																																																																								
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐																																																																																																								
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐																																																																																																								
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐																																																																																																								
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐																																																																																																								
Past Expiry Date	☐	Manufacturing Process	☐																																																																																																												
Misidentified	☐	Past Due	☒	OTHER : _____																																																																																																											

This drawing, specifications, and concepts contained here in are the sole property of Red Barn Machine, and may not be reproduced or used in any fashion without the prior written permission of Red Barn Machine.

REVISIONS					
REV	DESCRIPTION	DATE	INITIAL	APPROVED	
1	REDRAWN FROM 1980 DILAPIDATED PRINTS.	4/10/08	WP	RW	
2	ADDED -1 HEAT TREAT 28-32 RC AND CH'D MATERIAL FROM STRESS' PROOF. CH'D ENGRAVE NOTE.	8/2/12	RJC	SE	



BSC ADAPTER

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS
		-3	1		ADAPTER	4140	3/8 X 2-1/2 X 2-1/2
		B/O	2		DOWEL PINS	HARDENED STEEL	Ø.187 x 3/4
ASSY #							

RED BARN MACHINE	
TITLE TORQUE WRENCH ADAPTER ASSEMBLY; FOUR BLADED TAIL ROTOR ASSY.	
DWG NO. RBD29826	REV 2
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON:	DRAWN BY: PERRITT
DECIMALS .XXX ± .005	APPROVED: <i>D. M.</i>
XX ± .01	HEAT TREAT 28-32 RC
X ± .1	FINISH BLACK OXIDE
FRACTIONS ± 1/32	SPEC
ANGLES ± 5°	USED ON MODEL
UNLESS OTHERWISE SPECIFIED	MD
1. BREAK ALL SHARP EDGES	
.015 x 45° PR .015 R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 4-10-08 SHEET 1 of 1

100-12/1032-400